AMENDMENTS TO THE CLAIMS

1-96. (Canceled)

97. (Currently Amended) A support comprising an array of microchips immobilized on said support, each of said microchips comprising an array of oligonucleotide probes ~~for sequencing of a target nucleic acid~~ immobilized on the surface of each of said microchips, each of said microchips being separated by a physical barrier or a hydrophobic surface from every other microchip, said physical barrier or hydrophobic surface defining distinct spatial areas which keep microchips and probes in corresponding arrays and each of said microchips having oligonucleotides with different sequences attached thereto at different locations.

98-156. (Canceled)

157. (Previously Presented) The support of claim 97 wherein the physical barrier is a groove.

158. (Previously Presented) The support of claim 97 wherein the hydrophobic surface is a hydrophobic strip.

159. (Previously Presented) The support of claim 97 wherein the microchips are arranged in multiple rows and columns.

160. (Previously Presented) The support of claim 97 wherein the microchips are positioned for use with multichannel pipet.

161. (Previously Presented) The support of claim 97 combined as a kit with at least one component selected from: hybridization buffer, washing buffer, control DNA, a set of labeled probes, ligation enzyme, chemical ligation agent, and ligation buffer.

162. (Previously Presented) The support of claim 97 wherein the microchips are arrayed in an 8 times 12 format.

163. (Previously Presented) The support of claim 97 wherein there are more than 256 oligonucleotide probes per array.

164. (Previously Presented) The support of claim 97 wherein the oligonucleotide probes are between about 4 and about 9 bases in length.

165. (Previously Presented) The support of claim 97 wherein the oligonucleotide probes are prepared on the microchip via a light-directed oligonucleotide synthesis.

166. (Currently Amended) A support comprising an array of micro arrays of oligonucleotides, said oligonucleotides ~~for sequencing a target nucleic acid~~ immobilized on said support, wherein each microarray is separated by a physical barrier or a hydrophobic surface from every other microarray, said physical barrier or hydrophobic surface creating distinct spatial areas which keep probes in corresponding microarrays and each microarray having oligonucleotides with different sequences attached thereto.

167. (Previously Presented) The support of claim 166 wherein the physical barrier is a groove.

168. (Previously Presented) The support of claim 166 wherein the hydrophobic surface is a hydrophobic strip.

169. (Previously Presented) The support of claim 166 wherein the microarrays of oligonucleotides are arranged in multiple rows and columns.

170. (Previously Presented) The support of claim 166 wherein the microarrays of oligonucleotides are positioned for use with a multichannel pipet.

171. (Previously Presented) The support of claim 166 combined as a kit with at least one component selected from: hybridization buffer, washing buffer, control DNA, a set of labeled probes, ligation enzyme, chemical ligation agent, and ligation buffer.

172. (Previously Presented) The support of claim 166 wherein the microarrays of oligonucleotides are arrayed in an 8 times 12 format.

173. (Previously presented) The support of claim 166 wherein there are more than 256 oligonucleotides per microarray.

174. (Previously Presented) The support of claim 166 wherein the oligonucleotides are between about 4 and about 9 bases in length.

175. (Previously Presented) The support of claim 166 wherein the oligonucleotides are prepared on the support via a light-directed oligonucleotide synthesis.

176. (Withdrawn) A method to obtain probe:nucleic acid fragment complexes comprising the step of

contacting the support of claim 97 or claim 166 with a nucleic acid fragment under condition that permit complex formation between a oligonucleotide probe on the support and the nucleic acid fragment.

177. (Previously Presented) The support of claim 97 wherein said physical barrier or hydrophobic surface permits an amount of a labeled probe to be transferred separately to each microchip.

178. (Previously Presented) The support of claim 97 wherein said physical barrier or hydrophobic surface permits parallel execution of reactions on said microchips.

179. (Previously Presented) The support of claim 166 wherein said physical barrier or hydrophobic surface permits an amount of a labeled probe to be transferred separately to each array.

180. (Previously Presented) The support of claim 166 wherein said physical barrier or hydrophobic surface permits parallel execution of reactions on said arrays.

181. (Previously Presented) An apparatus comprising a solid support comprising a plurality of sections, each section comprising an array of oligonucleotides attached to the support, wherein the sections are separated from each other by physical barriers or hydrophobic strips to permit parallel execution of reactions in said arrays of oligonucleotides.

182. (Previously Presented) An apparatus of claim 181 wherein said physical barriers or hydrophobic strips permit a labeled probe to be transferred separately to each section.

183. (Cancelled)

184. (Previously Presented) The apparatus of claim 181 wherein arrays are identical with each other.

185. (Previously Presented) The apparatus of claim 181 wherein arrays are different from each other.

186. (Previously Presented) An apparatus comprising a solid support comprising a plurality of sections, each section comprising an array of oligonucleotides attached to the support, wherein the sections are separated from each other by physical barriers or hydrophobic strips to permit transfer of an amount of a labeled probe separately to each section.

187. (Previously Presented) The apparatus of claim 186 wherein arrays are identical with each other.

188. (Previously Presented) The apparatus of claim 186 wherein arrays are different from each other.

189. (Cancelled)